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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,648	10/15/2001	Jeffrey Alan Hanks	KB4495 US NA	3222

23906 7590 02/13/2004

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
BARLEY MILL PLAZA 25/1128
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WILMINGTON, DE 19805

EXAMINER

VARNER, STEVE M

ART UNIT	PAPER NUMBER
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3635

DATE MAILED: 02/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/977,648

Applicant(s)

HANKS, JEFFREY ALAN

Examiner

Steve M Varner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson in view of Green.

Regarding claim 1, 8, Simpson shows a first layer of fabric (33) mounted on one layer of hardboard (5) and a second layer of structural sheathing (9). Simpson does not show high strength fibers bonded with a resin and plywood. Green shows high strength fibers bonded with a resin (Col. 1, Line 60-67). Plywood is equivalent to hardboard. It would have been obvious to one of ordinary skill in the art at the time the present invention was made to have high strength fibers bonded with a resin as in Green in the fabric of Simpson to increase the strength of the panel.

The first layer faces an interior portion of the structure and the second layer faces an outer layer of the structure.

Regarding claims 2, 6, 11-12, 16, the second layer thickness and the deflection are obvious design choices to produce a strong panel.

Regarding claim 3-5, 13-15, Simpson shows the basic claimed structure. Simpson does not show polyethylene, aramid, and glass fibers. Green shows polyethylene, aramid, and glass fibers (Col. 4, Line 55-60) It would have been obvious

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to one of ordinary skill in the art at the time the present invention was made to use polyethylene, aramid, and glass fibers as in Green in the structure of Simpson to strengthen the fabric.

Regarding claim 7, 17, Simpson shows the second layer (7) is hardboard, which is equivalent to plywood.

Regarding claims 9-10, the integral portion used for a wall or a ceiling are obvious design choices to put the panel in places it would be useful.

Response to Arguments

Applicant's arguments filed 1/4/03 have been fully considered but they are not persuasive.

Applicant argues that prior to his invention, a high strength fabric layer attached to a wall structure of structural sheathing has been unable to withstand a 15 pound 2X4 missile propelled at a speed of 100 miles per hour in accordance with the test procedure set forth in the present patent application.

A device is defined by structure claimed not by standards it is intended to meet. Applicant gives desired results with no specific structure to attain it.

Applicant argues that Simpson and Green are non-analogous art.

Simpson and Green are from the same class; therefore, they are analogous art.

Applicant argues that flexibility is of paramount importance and the instant invention employs an extremely thin layer of fabric.

Flexibility and the number of layers of fabric have not been claimed.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kavesh et al. presents a rigid polyethylene reinforced composites having improved short beam shear strength.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve M Varner whose telephone number is 703 308-1894. The examiner can normally be reached on M-F 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl D Friedman can be reached on 703 308-0839. The fax phone numbers for the organization where this application or proceeding is assigned are 703 305-7687 for regular communications.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-1113.

SV
February 4, 2004

A handwritten signature in black ink, consisting of a stylized 'S' followed by a vertical line.A handwritten signature in black ink, appearing to be 'Carl D. Friedman'.

Carl D. Friedman
Supervisory Patent Examiner
Group 3600